

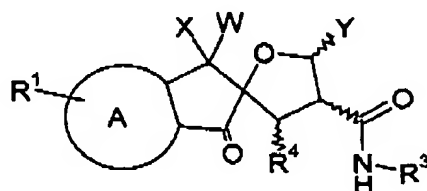
AMENDMENT
U.S. Appl. No. 10/772,721

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A compound of formula (I), or an enantiomer or diastereoisomer thereof:



(I)

wherein:

A is a 5- or 6-membered carbocyclic ring;

X is H and W is OH; or X and W together form a carbonyl group or an epoxide;

R¹ is H; or one or two substituents independently selected from the group consisting of: hydroxy; halo; lower alkyl; lower alkoxy; lower thioalkyl; haloalkyl (e.g. trifluoromethyl); or -C(O)R² wherein R² is lower alkyl, aryloxy or benzyloxy;

Y is phenyl optionally mono- or di-substituted with R⁵ or C(O)R⁶, wherein R⁵ is lower alkyl, lower cycloalkyl, lower alkoxy, halo, hydroxy, nitrile or trifluoromethyl, and R⁶ is lower alkyl, lower cycloalkyl, lower alkoxy, hydroxy or trifluoromethyl; said phenyl ring being optionally fused with a saturated or unsaturated 4 to 6-membered carbocyclic ring;

~~or Y is ethylene-phenyl, said ethylene moiety being optionally mono-substituted with lower alkyl, wherein said phenyl ring is optionally mono- or di-substituted with R⁵ or C(O)R⁶, wherein R⁵ and R⁶ are as defined above; said phenyl ring being optionally fused with a saturated or unsaturated 4 to 6-membered carbocyclic ring;~~

R³ is selected from the group consisting of: aryl, mono- or di-substituted with:

Het, said Het optionally mono- or di-substituted with lower alkyl, lower cycloalkyl, lower alkoxy, halo, hydroxy, nitrile, trifluoromethyl, C(O)R⁶ wherein R⁶ is as defined above;

AMENDMENT

U.S. Appl. No. 10/772,721

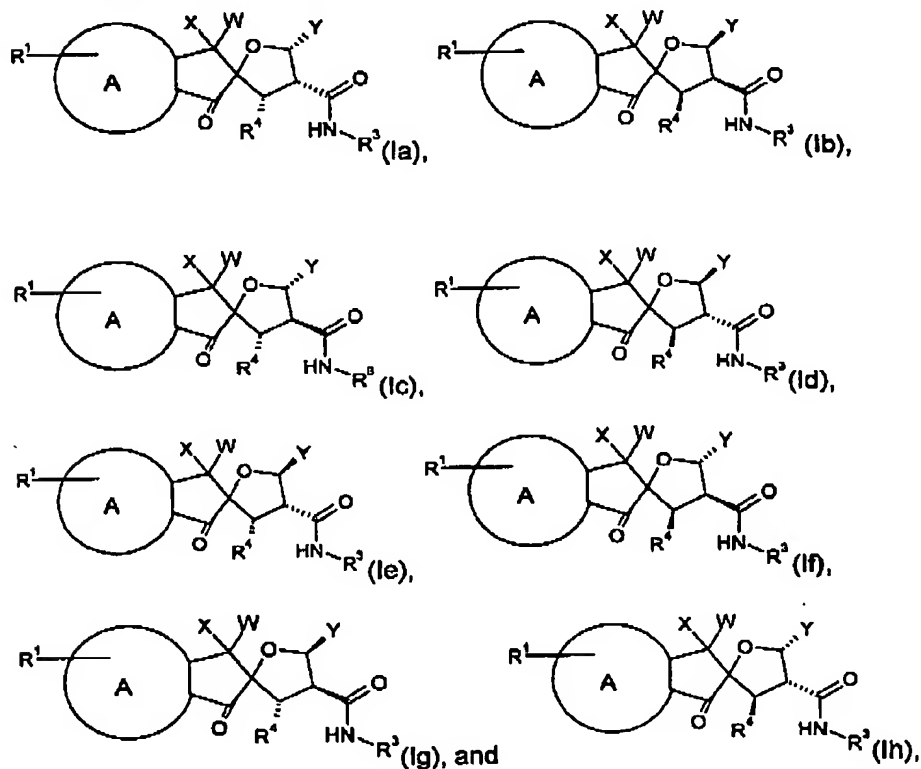
wherein each Het is independently a five-~~or six~~-membered, unsaturated heterocycle containing from one to three heteroatoms selected from nitrogen, oxygen and sulfur;

~~said Het being optionally fused with a saturated or unsaturated 4 to 6-membered ring optionally containing a heteroatom selected from N, O and S;~~

and

R^4 is a carboxylic acid, a salt or an ester thereof.

2. (original) A compound selected from:

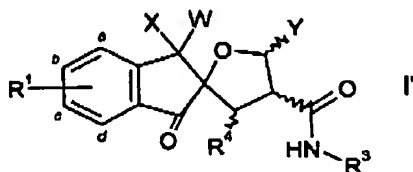


wherein A, X, R^1 , Y, R^3 , and R^4 are as defined in claim 1.

3. (original) A mixture of compound I(a) and compound I(b), each according to claim 2.

AMENDMENT
U.S. Appl. No. 10/772,721

4. (original) A mixture of compound I(c) and compound I(d), each according to claim 2.
5. (original) A compound mixture according to claim 3, wherein said mixture is racemic.
6. (original) A compound mixture according to claim 4, wherein said mixture is racemic.
7. (original) A compound I(a) according to claim 2, as a pure enantiomer.
8. (original) A compound I(b) according to claim 2, as a pure enantiomer.
9. (original) A compound I(c) according to claim 2, as a pure enantiomer.
10. (original) A compound I(d) according to claim 2, as a pure enantiomer.
11. (original) A compound according to claim 1 wherein X is H and W is OH; or X and W form a carbonyl group.
12. (original) A compound according to claim 9 wherein X and W form a carbonyl group.
13. (original) A compound according to claim 1 wherein ring A is a benzene ring, as represented by the formula I':



wherein X, R¹, W, Y, R³, and R⁴ are as defined in claim 1.

AMENDMENT

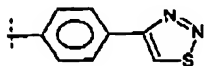
U.S. Appl. No. 10/772,721

14. (original) A compound according to claim 1, wherein R^1 is H; or one or two substituents independently selected from the group consisting of: hydroxy; halo; lower alkyl; lower alkoxy; lower thioalkyl; haloalkyl; or $-C(O)R^2$ wherein R^2 is lower alkyl, aryloxy or benzyloxy.
15. (original) A compound according to claim 14, wherein R^1 is H, halo or C_{1-4} alkyl.
16. (original) A compound according to claim 15, wherein R^1 is H, fluoro or methyl.
17. (original) A compound according to claim 16, wherein R^1 is H or methyl.
18. (currently amended) A compound according to claim 1, wherein Y is phenyl optionally mono- or di-substituted with R^5 or $C(O)R^6$, wherein R^5 is lower alkyl, lower cycloalkyl, lower alkoxy, halo, hydroxy, nitrile or trifluoromethyl, and R^6 is lower alkyl, lower cycloalkyl, lower alkoxy, hydroxy or trifluoromethyl; said phenyl ring being optionally fused with a saturated or unsaturated 4 to 6-membered carbocyclic ring; ~~or Y is ethylene phenyl, said ethylene moiety being optionally mono-substituted with lower alkyl, wherein said phenyl ring is optionally mono- or di-substituted with R^5 or $C(O)R^6$, wherein R^5 and R^6 are as defined above; said phenyl ring being optionally fused with a saturated or unsaturated 4 to 6-membered carbocyclic ring.~~
19. (currently amended) A compound according to claim 18, wherein Y is naphthyl, ~~CH=CH-phenyl, $C(CH_3)=CH$ -phenyl or phenyl~~, wherein the phenyl ring is optionally mono- or di-substituted at the 3, 4, or 5 position with R^5 , wherein R^5 is halo, C_{1-4} alkyl, hydroxy, CF_3 or $NHC(O)-(lower\ alkyl)$.
20. (original) A compound according to claim 19, wherein Y is phenyl optionally substituted with: 3,4-Cl; 3-F,4-Cl; 3-Cl,4-F; 3,4-Br; 3-F,4- CH_3 ; 3,4- CH_3 ; 3- CF_3 or $NHC(O)-(CH_2)_3CH_3$.
21. (original) A compound according to claim 20, wherein Y is phenyl optionally substituted with: 3,4-Cl or 3,4-Br.

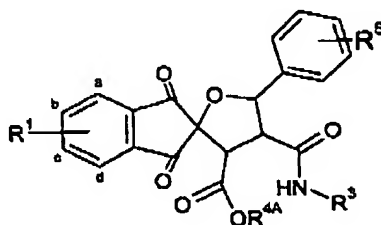
AMENDMENT

U.S. Appln. No. 10/772,721

22. (original) A compound according to claim 1, wherein R^3 is:



23. (currently amended) A compound selected from the group consisting of: compounds having the following formula:



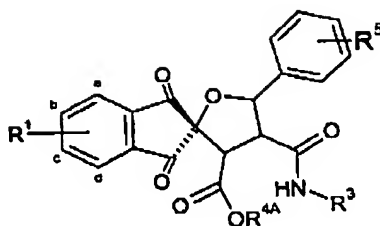
, wherein R^{4A} , R^1 , R^5 and R^3 are as defined as follows:

Cpd #	R^{4A}	R^1	$-R^5$	$-R^3$
4028	Na	--	3,4-Cl	
1052	Na	--	3,4-Cl	
1076	Na	--	3,4-Br	
1083	Na	--	3,4-F	

and

24. (original) A compound selected from the group consisting of: compounds having the following formula:

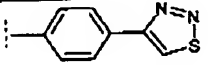
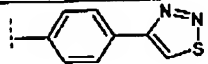
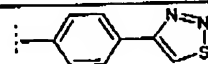
AMENDMENT
U.S. Appl. No. 10/772,721



wherein R^{4A} , R^1 , R^5 , and R^3 are as defined as follows:

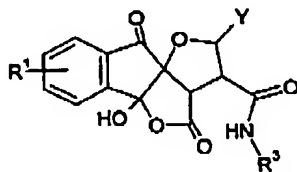
Cpd #	R^{4A}	R^1	$-R^5$	$-R^3$
A1001	Na	—	3,4-Br	 stereochemistry undetermined
A1002	Na	—	3,4-Br	 stereochemistry undetermined
A1006	Na	mixture b-Me & c-Me	3,4-Cl	 stereochemistry undetermined
A1007	Na	b-Me	3,4-Cl	 stereochemistry undetermined
A1008	Na	c-Me	3,4-Cl	 stereochemistry undetermined

AMENDMENT
U.S. Appl. No. 10/772,721

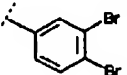
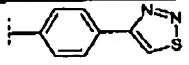
Cpd #	R ^{4A}	R ¹	-R ⁵	-R ³
A1009	Na	mixture b-Me & c-Me	3,4-Br	 stereochemistry undetermined
A1010	Na	b-Me	3,4-Br	 stereochemistry undetermined
A1011	Na	c-Me	3,4-Br	 stereochemistry undetermined

; and

25. (original) A compound having the following formula:



wherein R¹, Y, and R³ are as defined as follows:

Cpd #	R ¹	-Y	-R ³
3013	c-Me		

AMENDMENT
U.S. Appln. No. 10/772,721

26. (original) A pharmaceutical composition comprising an anti-papillomavirus virally effective amount of a compound of formula (I), according to claim 1, or a therapeutically acceptable salt or ester thereof, in admixture with a pharmaceutically acceptable carrier medium or auxiliary agent.
27. (original) A method for treating a papillomavirus viral infection in a mammal by administering to the mammal an anti-papilloma virus virally effective amount of a compound of formula (I), according to claim 1, or a therapeutically acceptable salt or ester thereof, or a pharmaceutical composition comprising an anti-papillomavirus virally effective amount of a compound of formula (I) according to claim 1, or a therapeutically acceptable salt or ester thereof, in admixture with a pharmaceutically acceptable carrier medium or auxiliary agent.
28. (original) A method for inhibiting the replication of papillomavirus by exposing the virus to an amount of a compound of formula (I), according to claim 1 inhibiting the papilloma virus E1-E2-DNA complex, or a therapeutically acceptable salt or ester thereof, or a composition comprising an anti-papillomavirus virally effective amount of a compound of formula (I) according to claim 1, or a therapeutically acceptable salt or ester thereof, in admixture with a pharmaceutically acceptable carrier medium or auxiliary agent.
29. (original) A method of preventing perinatal transmission of HPV from mother to baby, by administering a compound of formula (I), according to claim 1, to the mother prior to giving birth.